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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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08/904,299 07/31/97 LUNDBERG

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EXAMINER

QM51/0708

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EMRICH AND DITHMAR
SUITE 300
300 SOUTH WACKER DRIVE
CHICAGO IL 60606

KAMEN, N

ART UNIT

PAPER NUMBER

3747

DATE MAILED:

07/08/99

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

08/04,299

Applicant(s)

Lundberg

Examiner

Kemen

Group Art Unit

3747

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Response

A SHORTENED STATUTORY PERIOD FOR RESPONSE IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a response be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for response specified above is less than thirty (30) days, a response within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for response is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to respond within the set or extended period for response will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- ☒ Responsive to communication(s) filed on 6/14/99, paper 12.
- ☒ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1-22 is/are pending in the application.
- Of the above claim(s) 9, 17-22 is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-8, 10-16 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
 - ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received.
 - ☐ received in Application No. (Series Code/Serial Number) _____.
 - ☐ received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).

*Certified copies not received: _____

Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____
- ☐ Interview Summary, PTO-413
- ☐ Notice of References Cited, PTO-892
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Other _____

Office Action Summary

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DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-8 and 10-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over EPA'398 in view of Amir et al.

EPA'398 shows all of the recited elements but does include a heat exchanger "w" from a thermal machine. Amir et al. also disclose a preheater 20 but states that its inclusion is optional.

Therefore, one of ordinary skill in the art would have been motivated to selectively remove the preheater of EPA'398 in view of Amir et al. so as to reduce complexity, cost, etc.

The size of the power plant is deemed a matter of design choice based on calculable power consumption needs. The use of pressure gauges in every portion of a gas supply system is notoriously old.

Response to Arguments

3. Applicant's arguments filed 6/14/99 have been fully considered but they are not persuasive. The applicant argues that patent'398 requires the combustion of gas and the use of a heat exchanger driven by a thermal machine. The examiner contends that nowhere in patent'398 is there a recitation of combustion of gas and that the engine, if even used, could be powered by liquid fuel. Furthermore, the source of heat for heat exchanger "w" does not have to be from a

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"thermal machine", but merely from a machine that requires coolant. In any case, the secondary reference to Amir et al makes it clear that its preheater is optional in an essentially equivalent pressure reduction/power production system, hence would lead one to do likewise in patent'398. Applicant's arguments regarding twenty heat exchangers, efficiency of heat engines, unavailability of heat, flame temperatures are deemed merely speculations on the prior art.

Is not the cooler member of claim 9 also a heat exchanger of a thermal machine?

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Inquiries concerning the examiner's action should be directed to Noah Kamen at (703) 308-1945. The supervisory examiner, Henry Yuen, can be called at 308-1946. Fax is 308-7764. Questions of a general nature concerning the application should be directed to the group receptionist at 308-0861.


NOAH KAMEN
PRIMARY EXAMINER
ART UNIT 3747

June 23, 1999